## LONG TERM CARE

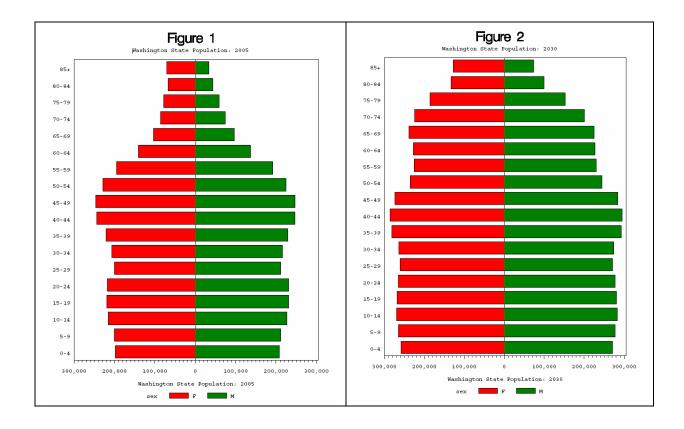
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## Demographic Impacts 2005-2030

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This paper examines the impact of demographic factors on state-funded long-term care programs between 2005 and 2030.

The period from 1946 to 1964 is referred to as the baby boom. The effects of the unusually high birth rates during that period are evident in the population of Washington State. Figures 1 and 2 are population pyramids describing the state population as it was in 2005 and as it is projected to be in 2030.



Several interesting points can be made looking at these graphs.

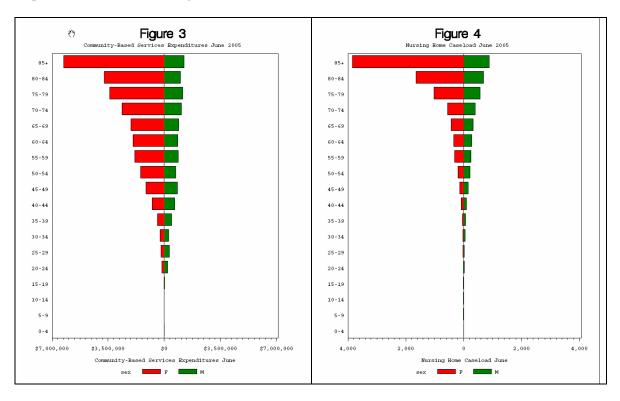
- The baby boom group appears in the 2005 graph on the left as a bulge in the middle age years from roughly 40 to 60. There is a smaller bulge trailing the first one by about 20 years, representing the children of the baby boomers.
- In the 2030 graph, the baby boomers have moved to the elderly population above 65.
- In both graphs, women outnumber men at older ages.
- Whereas the 2005 graph narrows rapidly towards the top, the narrowing at the top in the 2030 graph is much less pronounced. People aged 85 and above, particularly women, will be much more common in 2030 that they are now.

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The strategy for this report is to examine current usage of long term care services in each of the age sex cells. This study is based on services provided during June 2005. Assuming that rates of usage remain constant, the forecast of the state population by age and sex is used to create a forecast of future long term care usage. Many other changes are likely to take place between now and 2030. Therefore, this is a forecast of the future only in a very limited sense. However, this modeling strategy works well to isolate how much of an impact the change in age/sex structure will have on state-funded long-term care programs.

There are two large components of the state's long-term care program, nursing homes and community-based services. The data used is at the level of individual clients. Each client is characterized as to age, date of birth, and the amount of service provided. In the case of nursing homes, services provided are measured using the standard caseload definition. That is, paid days are divided by the number of days in the month to obtain a full-time equivalent (FTE) caseload. For community-based services, the measure is dollars paid on behalf of the client.

Figure 3 and 4 show how the services provided were distributed among the age/sex cells in June 2005. Figure 3 displays expenditures in dollars for the community-based services. Figure 4 displays full-time-equivalent months of nursing home services.

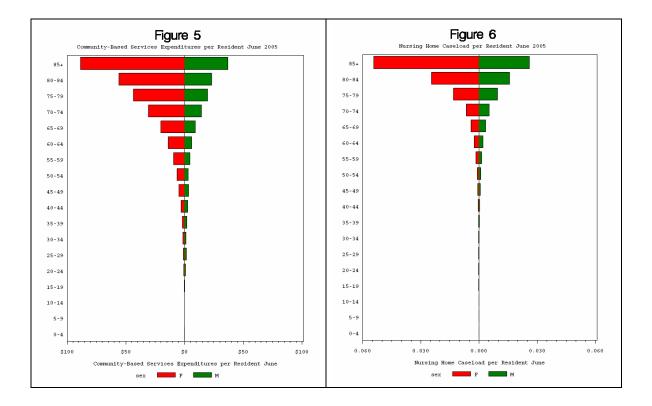


There are common patterns in these two pictures. Older women, age 85 and above, are responsible for a very large share of long-term care services in both components. However, this effect is stronger on the nursing home side. Men at all ages except for the very young consume much less in long term care services than women of the same age.

Figures 5 and 6 combine the data in Figures 3 and 4 with the 2005 population counts in Figure 1 to produce usage rates. Figure 5 shows the ratio of total dollars paid for clients in each age/sex cell to the total number of state residents in that cell. Figure 6 shows the total number of months of state-paid nursing home services for clients in each age/sex cell divided by the number of state residents in that cell.

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Looking at these graphs it is evident that there is a sex differential in usage rates. Longevity and usage rates both contribute to the heavier use of long term care by older women as opposed to men.



Application of these usage rates to the 2030 population produces a forecast of state-funded long-term care service usage in that year. The results are presented in Table 1. The dollar figures for community services expenditures in 2030 are 2005 dollars assuming no rate increases.

Table 1			
Summary Results			
Item	2005 Value	2030 Value	Annual
			Growth
			Rate
Community Services Expenditures	\$36,841,688	\$68,262,047	2.50%
Nursing Home Caseload	12,663	24,808	2.73%
Population 65 and Over	711,810	1,660,075	3.45%
Population 85 and Over	104,422	201,352	2.66%
Total Population	6,256,400	8,544,713	1.25%
Working Age Population (18-64)	4,013,651	4,930,206	.83%

Long-term care service usage is closely correlated with the population 85 and over. The population 65 and over grows more rapidly between now and 2030. The total population is projected to grow much more slowly, but faster by about fifty percent than the working age population. This last issue probably implies difficulty in staffing and costs for long-term care.

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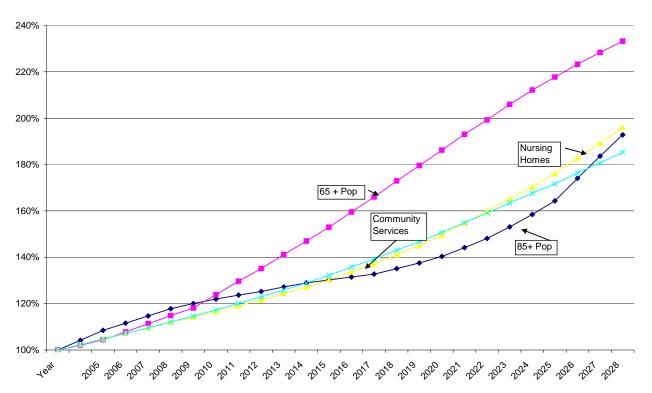


Figure 7
Growth of Long Term Care Services and Measures of the Aging Population

Figure 7 shows how state-funded long-term care services are projected to grow along with measures of the aging population over the next 25 years. The impact of the baby boom is evident in the change in the slope of the population 65 and over that takes place in 2011. This follows the 1946 beginning of the baby boom by exactly 65 years. The baby boom will probably have its greatest impact on long-term care after 2030. In 2031, it will have been 85 years from the start of the baby boom.